

Mr. Ben Rankin
Mid-Continent Coal & Coke Company
915 West 175th Street
Homewood, IL 60430

Re: Registered Construction and Operation Status,
CP 127-10340-00080

Dear Mr. Rankin:

The application from Mid-Continent Coal & Coke Company, received on December 13, 1996, has been reviewed. Based on the data submitted and the provisions in Sections 1 and 2 of 326 IAC 2-1, it has been determined that the coke fines screening plant consisting of the following equipment, located at 1150 East Boundary Road, Portage, Indiana 46368, is classified as registered:

- (a) One (1) main screening plant, consisting of the following:
 - (I) one (1) 28' x 14' feed hopper (ID MS1), with a maximum capacity of 85 tons per hour of metallurgical coke,
 - (II) two (2) PEP screens (ID MS2 and MS3), each with a maximum capacity of 42.5 tons per hour of metallurgical coke,
 - (III) one (1) 6' x 20' Hewitt Robbins Vibrator (ID MS4), with a maximum capacity of 23.38 tons per hour of metallurgical coke, and
 - (IV) six (6) rubber conveyors (ID MS5 thru MS10), each with a maximum capacity of 42.5 tons per hour of metallurgical coke.
- (b) One (1) auxiliary screening plant, consisting of one (1) 12' x 14' feed hopper (ID AS1), one (1) 6' x 20' Vibrator (ID AS2), and three (3) rubber conveyors (ID MS3 thru MS5), each with a maximum capacity of 43.75 tons per hour of unscreened metallurgical coke,
- (c) One (1) front screening plant, consisting of one (1) 12' x 12' feed hopper (ID FS1), one (1) 6' x 12' PEP screen (ID FS2), and three (3) rubber conveyors (ID FS3 thru 5) each with a maximum capacity of 25 tons per hour of metallurgical coke,

The following conditions shall be applicable:

1. Pursuant to 326 IAC 2-6-4, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

The source will be required to annually submit a statement of the actual emissions of all federally regulated pollutants from the source, for the purpose of fee assessment.
2. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).
3. Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), the particulate matter (PM) emissions from:
 - (a) the coke processing facilities shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

4. Any change or modification which may increase the allowable PM emissions to greater than 25 tons per year or more from the equipment covered in this registration must be approved by the Office of Air Management (OAM) before such change may occur.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

YP
cc:

File - Porter County
Porter County Health Department
Air Compliance - Bob Simmons
Northwest Regional Office
Permit Tracking - Janet Mobley
Technical Support & Modelling Section- Nancy Landau

Indiana Department of Environmental Management (IDEM) Office of Air Management

Technical Support Document (TSD) for Registered Emission Units

Source Background and Description

Source Name: Mid-Continent Coal and Coke Company
 Initial Source Location: 1150 East Boundary Road, Portage, Indiana 46368
 Initial County: Porter
 SIC Code: 5052
 Operation Permit No.: CP 127-10340-00080
 Permit Reviewer: Yogesh Parikh

The Office of Air Management (OAM) has reviewed a permit application from Mid-Continent Coal and Coke Company relating to the operation of a portable metallurgical coke screening source with a maximum capacity of 153.75 tons per hour of metallurgical coke to be initially located at 1150 East Boundary Road, Portage, Indiana 46368, consisting of the following facilities/units.

- (a) One (1) main screening plant, consisting of the following;
 - (1) one (1) 28' x 14' feed hopper (ID MS1), with a maximum capacity of 85 tons per hour of metallurgical coke,
 - (2) two (2) PEP screens (ID MS2 and MS3), each with a maximum capacity of 42.5 tons per hour of metallurgical coke,
 - (3) one (1) 6' x 20' Hewitt Robbins Vibrator (ID MS4), with a maximum capacity of 23.38 tons per hour of metallurgical coke, and
 - (4) six (6) rubber conveyors (ID MS5 thru MS10), each with a maximum capacity of 42.5 tons per hour of metallurgical coke.
- (b) One (1) auxiliary screening plant, consisting of one (1) 12' x 14' feed hopper (ID AS1), one (1) 6' x 20' Vibrator (ID AS2), and three (3) rubber conveyors (ID MS3 thru MS5), each with a maximum capacity of 43.75 tons per hour of unscreened metallurgical coke,
- (c) One (1) front screening plant, consisting of one (1) 12' x 12' feed hopper (ID FS1), one (1) 6' x 12' PEP screen (ID FS2), and three (3) rubber conveyors (ID FS3 thru 5) each with a maximum capacity of 25 tons per hour of metallurgical coke,

Source Definition

Bethlehem Steel Corporation has submitted their part 70 application on July 22, 1996. (T 127-6301-00078). The coke screening operation is located at the site of Bethlehem Steel Corporation. This operation will be considered as a support facility of Bethlehem Steel Corporation because more than 50 % of the materials (screened coke) will be purchased and processed for Bethlehem Steel Corporation.

The coke screening operation will be located inside the Bethlehem Steel Corporation's plant that is on an adjacent property about 600 feet apart. The SIC codes will be same and under same common control. Therefore, it is considered as a part of Bethlehem Steel Corporation. Therefore, the two plants are considered as same Source. The emissions from the coke screening operations shall be incorporated in to Title V permit application.

Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete permit application for the purposes of this review was received on December 13, 1996. Additional information was received on August 18, 1996.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, 2pages).

Total Potential and Allowable Emissions

Pollutant	Allowable Emissions		Potential Emissions	
	(lb/day)	(ton/yr)	(lb/day)	(ton/yr)
PM/PM10	1177.5	214.9	90.52	16.52
SO ₂	0.0	0.0	0.0	0.0
VOC	0.0	0.0	0.0	0.0
CO	0.0	0.0	0.0	0.0
NO _x	0.0	0.0	0.0	0.0
Single HAP	0.0	0.0	0.0	0.0
Combination of HAPs	0.0	0.0	0.0	0.0

- (a) Allowable PM emissions are determined from the applicability of rule 326 IAC 6-3-2. See attached spreadsheets for detailed calculations.
- (b) The allowable emissions of PM based on the rules cited are greater than the potential emissions, therefore, the potential emissions are used for the permitting determination.
- (c) Allowable emissions (as defined in the Indiana Rule 326 IAC 2-1) of PM are less than 25 tons per year but greater than 25 pounds per day, respectively. Therefore, pursuant to 326 IAC 2-1, a registration is issued.
- (d) Allowable emissions (as defined in the Indiana Rule) of a single hazardous air pollutant (HAP) are less than 10 tons per year and/or the allowable emissions of any combination of the HAPs are less than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, a construction permit is not required.

County Attainment Status

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating

the rule applicability relating to the ozone standards. Porter County has been designated as severe nonattainment for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for emission offset, 326 IAC 2-3.

- (b) Porter County has been classified as attainment for rest of the criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Part 70 Permit Determination

The existing source (Bethlehem Steel Corporation) has submitted their Part 70 (T-127-6301-00078) application on July 22, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Portable Source

- (a) Initial Location
This is a portable source and its initial location is 1150 East Boundary Road, Portage, Indiana 46368.
- (b) PSD and Emission Offset Requirements
The emissions from this portable source were reviewed under the requirements of the Prevention of Significant Deterioration (PSD), 326 IAC 2-2, 40 CFR 52.21, and Emission Offset, 326 IAC 2-3.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed sources under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Federal Rule Applicability

- (a) This metallurgical coke processing plant is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.380, Subpart LL), because the source does not contain any mill or concentrator facilities.
- (b) This metallurgical coke processing plant is not subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.250 through 60.254, Subpart Y, because the source does not process coal.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) applicable to this source.

State Rule Applicability

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of NOx in Porter County. Pursuant to this rule, the owner/operator

of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

The source will be required to annually submit a statement of the actual emissions of all federally regulated pollutants from the source, for the purpose of fee assessment.

326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

326 IAC 6-6 (Source Specific and Facility Emission Limitations for TSP in Porter County)

326 IAC 6-6 (Source Specific and Facility Emission Limitations for TSP in Porter County) does not apply because the source is not one of the listed sources or facilities specifically listed in the rule.

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations), the particulate matter (PM) emissions from:

- (a) the coke processing facilities shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

None of the listed air toxics will be emitted from this source.

Conclusion

The operation of this portable metallurgical coke screening source with a maximum capacity of 153.75 tons per hour to be initially located at 1150 East Boundary Road, Portage, Indiana 46368 shall be subject to the conditions of the attached proposed **Registration No. CP127-10340-00080**.